CLAIMS

1.　　　　　　An information retrieving system, which retrieves information according to image data, comprising:

a terminal unit having:

image data obtaining means for obtaining image data;

transmitting means for transmitting the image data obtained by the image data obtaining means to a communication network, and

a server unit having:

a first database in which retrievable recognizing image data are registered;

a second database in which meta data corresponding to the recognizing image data registered to the first database are registered;

receiving means for receiving the image data transmitted from the terminal unit through the network;

retrieving means for retrieving the recognizing image data that match an image element of the image data with a high match rate from the first database according to the image data received by the receiving means; and

meta data extracting means for extracting the meta data from the second database according to a retrieved result of the retrieving means,

wherein the server unit allows the terminal

unit to browse the meta data extracted by the meta data
extracting means through the communication network.

2.   The information retrieving system as set
forth in claim 1,

wherein the retrieval means calculates a
score of a match rate of the image data transmitted
from the terminal unit with the recognizing image data
according to feature data of the image data and
retrieves the recognizing image data whose score
exceeds a predetermined value as image data having the
high match rate.

3.   The information retrieving system as set
forth in claim 2,

wherein the server unit side obtains the
feature data.

4.   The information retrieving system as set
forth in claim 2,

wherein the terminal unit pre-obtains the
feature data of the image data obtained by the image
data obtaining mans and the transmitting means
transmits the feature data as the image data.

5.   The information retrieving system as set
forth in claim 1,

wherein the retrieving means retrieves the
recognizing image data according to gray-scaled data of
the image data obtained by the image data obtaining
means.

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6.   The information retrieving system as set forth in claim 1,

wherein the retrieving means retrieves the recognizing image data according to data containing color information of the image data obtained by the image data obtaining means.

7.   The information retrieving system as set forth in claim 1,

wherein when the image data received by the receiving means are moving picture data, the retrieving means retrieves the recognizing image data for each of frames into which the moving picture data are divided.

8.   The information retrieving system as set forth in claim 7,

wherein the retrieving means treats the recognizing image data commonly contained in the frames of the moving picture data with a rate larger than a predetermined value as a retrieved result of the moving picture data.

9.   The information retrieving system as set forth in claim 1,

wherein the retrieving means outputs retrieved results corresponding to a plurality of image elements contained in the image data received by the receiving means.

10.   The information retrieving system as set forth in claim 9,

wherein the retrieving means has first

recognizing means for recognizing a person, second

recognizing means for recognizing characters, and third

recognizing means for recognizing a shape other than a

5   persona and characters, and

wherein the first, second, and third

recognizing means perform recognizing processes for the

image data and retrieve a person, characters, and a

shape other than the person and the characters

10   contained in the image data as image elements from the

recognizing image data.

11.   The information retrieving system as set

forth in claim 9,

wherein the meta data are extracted from the

15   second database according to a retrieved result of a

part of a plurality of image elements contained in the

image data and other image elements of the plurality of

image elements are retrieved from the first database

according to the extracted meta data.

20   12.   The information retrieving system as set

forth in claim 1,

wherein the server unit transmits an address

of the communication network for the meta data

extracted by the meta data extracting means to the

25   terminal unit and provides the meta data to the

terminal unit on the communication network.

13.   The information retrieving system as set

forth in claim 1,

wherein the server unit transmits the meta data extracted by the meta data extracting means to the terminal unit through the communication network.

5   14.   The information retrieving system as set forth in claim 1,

wherein when the meta data are browsed with the terminal unit, the terminal unit can access an address of the communication network relating to the

10   meta data according to the meta data.

15.   The information retrieving system as set forth in claim 1,

wherein the terminal unit is a portable camera telephone terminal.

15   16.   An information retrieving method of retrieving information according to image data, comprising the steps of:

causing a terminal unit to obtain image data;

transmitting the image data obtained at the

20   image data obtaining step from the terminal unit to a communication network;

receiving the image data transmitted at the transmitting step through the network;

retrieving recognizing image data that match

25   an image element of the image data with a high match rate from a first database according to the image data received at the receiving step, retrievable recognizing

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image data being registered in the first database; and

extracting meta data from a second database corresponding to a retrieved result at the retrieving step, the meta data corresponding to the recognizing image data registered in the first database being registered in the second database,

wherein the terminal unit can browse the meta data extracted at the meta data extracting step through the communication network.

17. An information retrieval apparatus which retrieves information according to image data, comprising:

a first database in which retrievable recognizing image data are registered;

a second database in which meta data corresponding to the recognizing image data registered to the first database are registered;

receiving means for receiving image data transmitted from a terminal unit through a communication network;

retrieving means for retrieving the recognizing image data that match an image element of the image data with a high match rate from the first database according to the image data received by the receiving means; and

meta data extracting means for extracting the meta data from the second database according to a

retrieved result of the retrieving means,

wherein the terminal unit can browse the meta data extracted by the meta data extracting means through the communication network.

5   18.   An information retrieval method of retrieving information according to image data, comprising the steps of:

receiving image data transmitted from a terminal unit through a communication network;

10   retrieving recognizing image data that match an image element of the image data with a high match rate from a first database according to the image data received at the receiving step, retrievable recognizing image data being registered in the first database; and

15   extracting meta data from a second database according to a retrieved result at the retrieving step, the meta data corresponding to the recognizing image data registered to the first database being registered in the second database,

20   wherein the terminal unit can browse the meta data extracted at the meta data extracting step through the communication network.

19.   An information retrieving program which causes a computer unit to execute an information 25   retrieving method of retrieving information according to image data, the information retrieving method comprising the steps of:

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receiving image data transmitted from a
terminal unit through a communication network;

retrieving recognizing image data that match
an image element of the image data with a high match
5   rate from a first database according to the image data
received at the receiving step, retrievable recognizing
image data being registered in the first database; and

extracting meta data from a second database
according to a retrieved result at the retrieving step,
10   the meta data corresponding to the recognizing image
data registered to the first database being registered
in the second database,

wherein the terminal unit can browse the meta
data extracted at the meta data extracting step through
15   the communication network.

20.   An image recognizing apparatus which
recognizes a predetermined shape from image data,
comprising:

a first database in which retrievable
20   recognizing image data are registered;

a second database in which meta data of the
recognizing image data registered to the first database
are registered;

retrieving means for retrieving the
25   recognizing image data that match an image element of
the image data with a high match rate from the first
database according to input image data; and

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meta data extracting means for extracting the
meta data from the second database according to a
retrieved result of the retrieving means.

21.   The image recognizing apparatus as set forth
in claim 20,

wherein the retrieval means calculates a
score of a match rate of the input image data with the
recognizing image data according to feature data of the
input image data and retrieves the recognizing image
data whose score exceeds a predetermined value as image
data having the high match rate.

22.   The image recognizing apparatus as set forth
in claim 20,

wherein the retrieving means retrieves the
recognizing image data according to gray-scaled data of
the input image data.

23.   The image recognizing apparatus as set forth
in claim 20,

wherein the retrieving means retrieves the
recognizing image data according to data containing
color information of the input image data.

24.   The image recognizing apparatus as set forth
in claim 20,

wherein when the input image data are moving
picture data, the retrieving means retrieves the
recognizing image data for each of frames into which
the moving picture data are divided.

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25.   The image recognizing apparatus as set forth
in claim 24,

wherein the retrieving means treats the
recognizing image data commonly contained in the frames
of the moving picture data with a rate larger than a
predetermined value as a retrieved result of the moving
picture data.

26.   The image recognizing apparatus as set forth
in claim 20,

wherein the retrieving means outputs
retrieved results corresponding to a plurality of image
elements contained in the image data.

27.   The image recognizing apparatus as set forth
in claim 26,

wherein the retrieving means has first
recognizing means for recognizing a person, second
recognizing means for recognizing characters, and third
recognizing means for recognizing a shape other than a
persona and characters, and

wherein the first, second, and third
recognizing means perform recognizing processes for the
image data and retrieve a person, characters, and a
shape other than the person and the characters
contained in the image data as image elements from the
recognizing image data.

28.   The image recognizing apparatus as set forth
in claim

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26,

wherein the retrieving means retrieves the meta data from the second database according to a retrieved result of a part of a plurality of image elements contained in the image data and other image elements of the plurality of image elements from the first database according to the extracted meta data.

29.   An image recognizing method of recognizing a predetermined shape from image data, comprising the steps of:

retrieving recognizing image data that match an image element of input image data with a high match rate from a first database according to the input image data, the retrievable recognizing image data being registered in the first database; and

extracting meta data from a second database according to a retrieved result at the retrieving step, the meta data of the recognizing image data registered to the first database being registered in the second database.

30.   An image recognizing program which causes a computer unit to execute an image recognizing method of recognizing a predetermined shape from image data, comprising the steps of:

retrieving recognizing image data that match an image element of input image data with a high match rate from a first database according to the input image

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data, the retrievable recognizing image data being registered in the first database; and

extracting meta data from a second database according to a retrieved result at the retrieving step, the meta data of the recognizing image data registered to the first database being registered in the second database.

31.   A sales system, comprising:

a terminal unit which obtains image data and transmits them to a communication network;

a server unit which can communicate with the communication network and outputs meta data of image data according thereto; and

a product sales section which can provide related information of the meta data and/or a product,

wherein the server unit charges the terminal unit, outputs the meta data according to the image data transmitted from the terminal unit so that it can brose the meta data, and introduces the terminal unit as a customer to the product sales section,

wherein the product sales section provides related information that the terminal unit can browse and/or a product to the terminal unit introduced as the customer, and

wherein the terminal unit pays the product sales section for the provided information and/or product.

32.   A sales system, comprising:

a terminal unit which obtains image data and transmits them to a communication network;

a server unit which can communicate with the communication network and outputs meta data of image data according thereto; and

a product sales section which can provide related information of the meta data and/or a product,

wherein the server unit outputs the meta data according to the image data transmitted from the terminal unit so that it can brose the meta data,

wherein the terminal unit pays the server unit for related information of the meta data that the terminal unit can brose and/or a product,

wherein the server unit pays the product sales section for a part of the related information and/or the product, and

wherein the product sales section provides the related information and/or the product to the terminal unit.

33.   A sales system, comprising:

a terminal unit which obtains image data and transmits them to a communication network;

a server unit which can communicate with the communication network and outputs meta data of image data according thereto; and

a product sales section which can provide

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related information of the meta data and/or a product,

wherein the terminal unit transmits the image data to the product sales section,

wherein the product sales section obtains

5   meta data according to the image data transmitted from the terminal unit through the server unit and pays the server unit for a rental fee,

wherein the product sales section allows the terminal unit to browse the meta data according to the

10   image data transmitted from the terminal unit through the server unit, and

wherein the terminal unit pays the product sales section for related information of the meta data that the terminal unit can browse and/or a product.

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